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Exercise - I (Conceptual Questions) Build Up Your Understanding

INTRODUCTION AND MECHANISM OF HORMONE ACTION

1. A hormone is :-
(1) An enzyme
(2) Chemical messenger
(3) Primary messenger
(4) (2) and (3) both

2. Integrative system in the body are :-
(1) Endocrine system
(2) Nervous system
(3) Blood vascular system
(4) Both endocrine and nervous system

3. Endocrine glands can be defined as those glands which pour their secretion :-
(1) Directly into blood
(2) Into blood or ducts
(3) When they are cut
(4) into particular organ

4. The receptor for protein hormones are present on
(1) Nucleus
(2) Endoplasmic reticulum
(3) Cytoplasm
(4) Cell-surface

5. Hormones are :-
(1) Internal secretion mostly discharged in the blood by endocrine glands
(2) Secretion of exocrine glands
(3) Chemical substances secreted into the gut
(4) Inorganic catalysts

6. Hormones are :-
(1) Produced in low amount
(2) Easily diffusible
(3) Non - antigenic
(4) All

7. Term "Hormone' was coined by :-
(1) W.M. Baylis (2) E.H. Schally
(3) E.H. Starling (4) Harris

8. Statement not correct for hormones is that, these:-
(1) Are not all protein
(2) Are secreted in small amount
(3) Affect metabolism
(4) Acts as catalyst

9. "Secondary messenger" is :-
(1) Cyclic A.M.P. (2) ATP
(3) ADP (4) DNA

10. Hormones are chemically :-
(1) Amino acid (2) Protein
(3) Steroid (4) All

11. First discovered hormone :-
(1) Thyroxine (2) Adrenaline
(3) Secretin (4) Insulin

12. Which of the following is not a steroid hormone?
(1) Androgen (2) Aldosterone
(3) Estrogen (4) Relaxin

13. Which of the following is not an endocrine gland?
(1) Pancreas (2) Adrenal gland
(3) Thyroid gland (4) Salivary gland

14. Which of the following hormones is not proteinaceous is nature ?
(1) TSH (2) Aldosterone
(3) LH (4) FSH

15. Which of the hormone is polypeptide ?
(1) LH (2) FSH
(3) Insulin (4) Thyroxine

16. Steroid hormones transmit their information by :
(1) Stimulating the receptors present on cell membrane.
(2) Entering into the cell and modifying cellular contents.
(3) Entering into the cell and modifying nuclear organisation.
(4) The help of an intracellular second messenger.

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17. Who is known as "father of endocrinology" ?
(1) R.H. Whittakar (2) Pasteur
(3) Einthoven (4) Thomas Addison

18. Which is not a peptide hormone-
(1) Insulin (2) Cortisol
(3) Gluagon (4) All of these

19. If receptor molecule is removed from target organ for hormone action, the target organ will :
(1) Continue to respond but require higher concentration of hormone.
(2) Continue to respond but in opposite way.
(3) Continue to respond without any difference.
(4) Not respond to hormone.

20. Prostaglandins are –
(1) Amino acid (2) Steroid
(3) Fatty acid (4) Carbohydrate

PITUITARY GLAND AND HYPOTHALAMUS

21. Pituitary gland does not control the secretory activity of :-
(1) Thyroid (2) Adrenal cortex
(3) Adrenal medulla (4) Testes

22. Which of the following controls spermatogenesis :-
(1) FSH (2) LTH
(3) LH (4) Vasopressin

23. Which is called "Master gland" of the body :-
(1) Thyroid (2) Pituitary
(3) Thymus (4) Adrenal

24. The hyposecretion of pituitary hormone cause :-
(1) Cretinism
(2) Diabetes insipidus
(3) Goitre
(4) Diabetes melitus

25. Neurohypophysis releases :-
(1) Vasopressin
(2) Oxytocin
(3) Oxytocin & prolactin
(4) Vasopressin & oxytocin

26. Hormone secreted by pituitary gland are chemically –
(1) All protein
(2) All steroid
(3) Complex compounds of proteins and carbohydrates
(4) Some steroid and some protein

27. Growth hormone is produced in :-
(1) Adrenals (2) Thyroid
(3) Pituitary (4) Thymus

28. Gonadotrophic hormone is produced by :-
(1) Interstitial cells of testis
(2) Adrenal cortex
(3) Adenohypophysis
(4) Posterior part of thyroid

29. The hormones FSH and LH are together called:
(1) Emergency hormone
(2) Neuro hormone
(3) Gonadotrophic hormone
(4) Antistress hormone

30. Gigantism and acromegaly are due to :-
(1) Hyperpituitrism
(2) Hypopituitrism
(3) Hypothyroidism
(4) Hyperthyroidism

31. If amount of ADH decrease in blood, micturition :-
(1) Remains unchanged
(2) Decreases
(3) Increases
(4) Does not occur

32. Urine concentration is controlled by :-
(1) Oxytocin (2) ADH
(3) MSH (4) ACTH

33. The follicle stimulating hormone is secreted from:-
(1) Posterior lobe of pituitary gland
(2) Reproductive gland
(3) Thyroid gland
(4) Anterior lobe of pituitary gland

34. Pituitary gland is under control of :-
(1) Hypothalamus (2) Adrenal gland
(3) Pineal gland (4) Thyroid gland

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35. "Sella turcica" is a :-
(1) Depression in skull enclosing pituitary
(2) Cavity of skull enclosing ears
(3) Covering of testis
(4) Kind of endocrine gland

36. Vasopressin is responsible for :-
(1) Controlling Oogenesis
(2) Regulating blood pressure and act on the nephron tubules.
(3) Regulating formation of pigment.
(4) Controlling spermatogenesis.

37. The main function of prolactin hormone is to:
(1) Influence the activity of thyroid gland
(2) Control development of Graffian follicles
(3) Initiate and maintain secretion of milk by mammary gland
(4) Cause ejection of milk

38. The hormones of neurohypophysis are formed in:-
(1) Pars nervosa
(2) Pars distalis
(3) Supraoptic and paraventricular center
(4) Corpus callosum

39. I.C.S.H. in male acts on :-
(1) Cells of leydig (2) Sertoli cells
(3) Spermatids (4) Spermatogonia

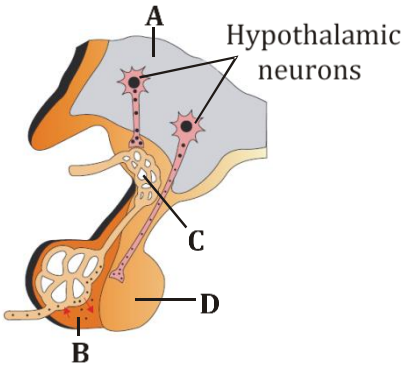
40. Hypophysis cerebri is the other name of :-
(1) Adenohypophysis
(2) Islets of langerhans
(3) Neurohypophysis
(4) Pituitary

41. Which of the following hormone helps in facultative water reabsorption by nephrons :-
(1) MSH (2) FSH
(3) ADH (4) ACTH

42. Hormone of hypothalamus are called :-
(1) Regulatory hormones
(2) Growth hormones
(3) Tropic hormones
(4) (1) and (3)

43. Diabetes insipidus disease is caused due to the deficiency of hormone produced by :-
(1) Pituitary (2) Adrenal
(3) Pancreas (4) Thyroid

44.



Which of the following option in given table is correct identification of the structures labelled as A,B,C and D and their corresponding function in the above figure:-

(1)	(A)	Hypothalamus	Produces Prolactin hormone
(2)	(B)	Posterior pituitary	Release & FSH and LH
(3)	(C)	Portal circulation	Supply blood from hypothalamus to posterior pituitary
(4)	(D)	Posterior pituitary	Release oxytocin and vasopressin

45. MSH Produced by the pars intermedia of pituitary causes in lower vertebrates :-
(1) Darkening of skin
(2) Light colouration of skin
(3) Both
(4) Body growth

46. LTH is also known as :-
(1) Lactogenic Hormone
(2) Prolactin
(3) Mammotropic Hormone
(4) All

47. Vasopressin is related with :-
(1) Concentration of urine
(2) Quick digestion
(3) Dilution of urine
(4) Slow heart beat

48. Growth hormone of pituitary is more effective in:-
(1) Presence of thyroxine
(2) Absence of thyroxine
(3) Absence of Insulin
(4) Presence of adrenaline

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49. Gonadotropic hormone is :-
(1) FSH (2) LH
(3) LTH (4) FSH, LH

50. MSH is secreted in man by which part of pituitary?
(1) Anterior Pituitary
(2) Middle lobe of pituitary
(3) Posterior lobe of pituitary
(4) Infundibulum

51. Oxytocin is used in :-
(1) Milk ejection
(2) Parturition
(3) Milk let down process
(4) All of the above

52. Hyper secretion of STH leads to :-
(1) Dwarfism & Acromegaly
(2) Goitre, Sterility
(3) Cretinism, Myxoedema
(4) Gigantism & Acromegaly

53. Oxytocin mainly helps in :-
(1) Milk production (2) Child birth
(3) Diuresis (4) Gametogenesis

54. Which hormone is concerned with the concentration of urine ?
(1) Oxytocin (2) Vasopressin
(3) Prolactin (4) Cortisol

55. Acromegaly is caused by :-
(1) Excess of S.T.H.
(2) Excess of Thyroxine
(3) Deficiency of Thyroxine
(4) Excess of Adrenaline

56. Oxytocin is released from :-
(1) Adenohypophysis (Anterior lobe)
(2) Adenohypophysis (Posterior lobe)
(3) Hypothalamus
(4) Neurohypophysis

57. FSH is :-
(1) Glycoprotein (2) Metalloprotein
(3) Glycolipid (4) Phospholipid

58. The synthesis of Vasopressin is done by :–
(1) Hypothalamus
(2) Kidney
(3) Anterior pituitary
(4) Post. pituitary

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59. Which one hormone of the pituitary of the human controls the protein metabolism and growth of skeleton ?
(1) Iodo thyroxine
(2) Leutotrophic hormone
(3) Somatotrophic hormone
(4) Oxytocin

60. Ovulation in mammals occurs mainly under the influence of :-
(1) TSH and ACTH
(2) FSH and LH
(3) TSH and STH
(4) MTH and ACTH

61. Secretion of estrogen is controlled by :-
(1) HCG (2) Progesterone
(3) LH (4) F.S.H.

62. Immediate cause of induction of ovulation in human female is plasma surge of :-
(1) Progesterone (2) LH
(3) FSH (4) Estradiol

63. Stimulation of uterine contraction during child birth is brought about by :-
(1) Adrenaline (2) Progesterone
(3) Oxytocin (4) Prolactin

64. Which gland secretion is under nervous control ?
(1) Adrenal cortex
(2) Anterior pituitary
(3) Posterior pituitary
(4) Pineal body

65. Which of the following is correct ?
(A) Pars distalis produces GH, PRL, TSH. ACTH, LH, FSH
(B) Pars intermedia secretes only one hormone called melatonin
(C) Posterior lobe of pituitary is also called as neurohypophysis or pars nervosa
(D) Posterior pituitary, stores and releases two hormones called oxytocin and vasopressin
(1) A, B & C (2) B, C & D
(3) A, C & D (4) B and C

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66. ADH responsible for reabsorption of water and reduction of urine secretion is synthesize by :
(1) Posterior pituitary gland
(2) Juxtaglomerular apparatus
(3) Anterior pituitary gland
(4) Hypothalamus

67. The hormones that initiates ejection of milk, stimulates milk production and growth of ovarian follicles are respectively known as :
(1) PRL, OT and LH
(2) OT, PRL and FSH
(3) LH, PRL and FSH
(4) PRH, OT and LH

68. Match the hormone in column I with their function in column II :

Column I		Column II	
a	FSH	i	Prepare endometrium for implantation
b	LH	ii	Develop female secondary sexual characters
c	Progesterone	iii	Contraction of uterine wall
D	Estrogen	iv	Development of corpus luteum
		v	Maturation of Graafian follicle

(1) a-v, b-iv, c-i, d-ii (2) a-iii, b-iv, c-i, d-ii
(3) a-iv, b-iii, c-ii, d-i (4) a-i, b-ii, c-iii, d-iv

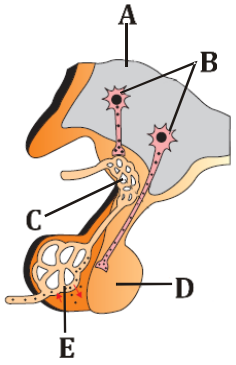
69. Which of the following is gonadotrophic hormone?
(1) Collip's hormone
(2) Prolactin
(3) Oxytocin
(4) Luteinizing hormone

70. FSH is produced by :
(1) Adrenal cortex
(2) Anterior lobe of pituitary gland
(3) Middle lobe of pituitary gland
(4) Posterior lobe of pituitary gland

71. Hormone that promotes cell division, protein synthesis and bone growth is –
(1) ACTH (2) ADH
(3) PTH (4) GH

72. An adenohypophysis hormone which is regulated by feedback mechanism is –
(1) Oxytocin (2) TSH
(3) Vaspressin (4) Cortisone

73. On the basis of below diagram choose the correct option which match the physiological function of hormones :-



(1) A–Only releases, D–Release and synthesis E–Only synthesis
(2) A–Only release, D–Only synthesis, E–Synthesis and release
(3) A–Synthesis and release, D–Only releases, E–Synthesis and releasing
(4) A–Synthesis and release, D–Only synthesis E–Only release

74. Vasopressin influences :
(1) Electrolyte efflux
(2) Nerve excitability
(3) Water reabsorption
(4) All of these

75. If ADH level of blood is less :
(1) Volume of urine increases
(2) Volume of urine decreases
(3) Volume of urine is normal
(4) Volume of urine is unaffected

76. Hormone prolactin is secreted by :
(1) Posterior pituitary (2) Thyroid
(3) Anterior pituitary (4) Hypothalamus

77. Spermatogenesis is influenced by:
(1) Progesterone (2) FSH
(3) STH (4) LTH

78. Which of the following hormones helps in the contraction of uterus during child birth:
(1) ADH (2) Androgen
(3) Oxytocin (4) Glucocorticoid

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79. Which of the following hormones stimulates the secretion of milk from female ?
(1) LH (2) Prolactin
(3) Oxytocin (4) Progesterone

80. The formation of egg and sperm is affected by:
(1) LH (2) MSH (3) TSH (4) FSH

81. Mammalian prolactin is secreted by –
(1) Adenohypophysis
(2) Neurohypophysis
(3) Adrenal cortex
(4) Adrenal medulla

82. Hypersecretion of growth hormone in the period of growth lead to :
(1) Acromegaly
(2) Cushing syndrome
(3) Midgets
(4) Gigantism

83. Acromegaly is a disease caused by :
(1) Over secretion of growth hormone in childhood
(2) Over secretion of growth hormone in adulthood
(3) Under secretion of growth hormone in adulthood
(4) Deficiency of calcium and phosphorous in the diet.

84. In absence of ADH, the disease caused is –
(1) Diabetes mellitus
(2) Diabetes insipidus
(3) Oligouria
(4) Acromegaly

85. Thyrotropin - releasing factor (TRF) is produced by:
(1) Cerebrum (2) Optic lobe
(3) Cerebellum (4) Hypothalamus.

86. Gonadotropic hormones are :
(1) Estrogen and progesterone
(2) Luteinizing hormone and follicle stimulating hormone
(3) Testosterone and Androsterone
(4) Prolactin and Luteotropin

87. Which hormone is responsible for milk ejection after the birth of the baby ?
(1) Oxytocin (2) Progesterone
(3) Prolactin (4) Estrogen

THYROID, PARATHYROID AND ADRENAL GLANDS

88. Largest endocrine gland is –
(1) Adrenal gland (2) Thyroid gland
(3) Thymus (4) Kidney

89. How many statements are correct regarding parathyroid gland ?
(a) Four parathyroid gland present on front side of thyroid gland
(b) It secretes parathromone which is steroidal in nature
(c) It increase blood Ca^{++} level
(d) It act on bone and stimulate bone resorption
(1) One (2) Two
(3) Three (4) Four

90. The basal metabolic rate (BMR) in body cells is regulated by :-
(1) Parathyroid (2) Thyroid
(3) Pituitary (4) Thymus

91. The hormones responsible for regulation of calcium and phosphorous metabolism is secreted by :–
(1) Pancreas (2) Thyroid
(3) Thymus (4) Parathyroid

92. Injection of which of the following increases metabolic rate ?
(1) STH (2) Insulin
(3) Thyroxine (4) Testosterone

93. Hypothyroidism in adults causes :-
(1) Addison's disease (2) Myxoedema
(3) Sterility (4) Cretinism

94. Parathormone regulates :-
(1) Blood calcium level
(2) Calcium and phosphate level
(3) Body temperature
(4) Basal metabolic rate

95. Which gland stores hormone in intercellular space before its secretion into blood ?
(1) Pancreas (2) Thyroid
(3) Testis (4) Ovary

96. Goiter is caused by the abnormal functioning of :-
(1) Pancreas (2) Adrenals
(3) Pituitary (4) Thyroid

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97. Parathormone deficiency in man causes :-
(1) Hyper calcemia
(2) Hypocalcaemia
(3) Goitre
(4) All

98. Cretinism is due to abnormal secretion of :-
(1) ACTH (2) Thyroxine
(3) Calcitonin (4) Parathormone

99. Philips collip discovered which of the following hormones ?
(1) Parathyroid hormone
(2) Thyroxine
(3) A.D.H.
(4) Oxytocin

100. Exopthalmic goitre is caused due to hypersecretion of :-
(1) Adrenal (2) Thyroid
(3) Parathyroid (4) Thymus

101. The main function of thyroid gland is to control :-
(1) Growth
(2) Reproduction
(3) Secondary sexual characters
(4) Basal metabolic rate

102. The two lobes of thyroid gland are joined by a horizontal connection called :-
(1) Inter thyroidal connective
(2) Inter thyroidal commissure
(3) Intermediary lobe
(4) Isthmus

103. The vitamin which works along with para thyroid hormone is :-
(1) Vitamin C (2) Calciferol
(3) Tocopherol (4) Vitamin - B_{12}

104. Storage gland is :-
(1) Pancreas (2) Testis
(3) Thyroid (4) Adrenal

105. Removal of Parathyroids in human beings result in
(1) Tetany
(2) Simmond's disease
(3) Myxoedema
(4) Addison's disease

106. Hyper secretion of Parathyroid hormone result in
(1) Stronger bones due to increased incorporation of calcium in them.
(2) Deposition of calcium in various skeletal structure
(3) No effect on the constitution of bones
(4) Weaker bones due to increased removal of calcium from them

107. One of the following is correct statement :-
(1) T_4 is more active than T_3
(2) T_3 is more active than T_4
(3) T_3 and T_4 are the same
(4) T_4 is hormone but T_3 is not

108. Hormone that decrease calcium level in blood:
(1) Thyroxine (2) Parathormone
(3) Thyrocalcitonin (4) Cortisol

109. BMR is increased due to :-
(1) ADH
(2) Adrenaline
(3) Parasympathetic nervous system
(4) Thyroxine

110. Goitre is a pathological condition associated with:
(1) Glucagon (2) Thyroxine
(3) Progesterone (4) Testosterone

111. Effects of thyroxine on metabolic rate is:-
(1) Decreases (2) No effect
(3) Increases (4) Uncertain

112. Deficiency of which of the following may cause bone deformation :-
(1) Oxytocin (2) Vitamin D
(3) STH (4) Thyroxine

113. Function of thyrocalcitonin :-
(1) To reduce the calcium level in blood
(2) To increase the calcium level in blood
(3) Oppose the action of thyroxine
(4) Maturation of gonads

114. Parathormone deficiency leads to :-
(1) Decrease of Ca^{+2} level in blood
(2) Increase of Ca^{+2} level in blood
(3) Osteoporosis
(4) Hypercalemia

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115. Parathormone controls :-
(1) Fatty acid metabolism
(2) Sodium and potassium metabolism
(3) Calcium and phosphate metabolism
(4) Protein metabolism

116. Parathyroid hormone –
(1) is produced by the thyroid gland
(2) is released when blood calcium levels fall
(3) stimulates osteoblasts to lay down new bone
(4) stimulates calcitonin release.

117. Undersecretion of adrenal cortex causes :-
(1) Sterility (2) Addison's disease
(3) Cretinism (4) Dwarfism

118. Epinephrine is :-
(1) Secreted from pancreas and decreases heart beat
(2) Secreted from adrenal medulla and increases heart beat
(3) Secreted from adrenal medulla and decreases heart beat
(4) Secreted from pancreas and increases heart beat

119. Hyposecretion of aldosterone causes :-
(1) Gull's disease
(2) Grave's disease
(3) Cushing's disease
(4) Addison's disease

120. Hormones produced by adrenal cortex and gonads (sex hormone) are chemically :-
(1) Proteinaceous
(2) Steroids
(3) Glycoprotein
(4) Phenolic compound

121. A tumour in the adrenal zona glomerulosa can cause hyper secretion of hormones produced in that region. Which of the following might you expect to find in a patient with such a tumour ?
(1) Increased blood sodium levels
(2) Increased blood glucose levels
(3) Decreased blood calcium levels
(4) Increased dehydration

122. The function of norepinephrine is :-
(1) Almost similar to epinephrine
(2) Similar to ADH
(3) Opposite to epinephrine
(4) Opposite to ADH

123. Epinephrine and norepinephrine together known as :-
(1) Steroid (2) Protein
(3) Catecholamine (4) Glycoprotein

124. 3F gland is :-
(1) Adrenal (2) Thyroid
(3) Gonadal (4) Pancreas

125. Retention of sodium in body depends up on hormone from :-
(1) Adrenal cortex (2) Adrenal medulla
(3) Parathyroid (4) Thyroid

126. Adrenal cortex also controls the carbohydrate metabolism through :-
(1) Adrenaline
(2) Noradrenaline
(3) Glucocorticoids
(4) Mineralo Corticoids

127. "4s gland" is :-
(1) Pancreas (2) Liver
(3) Thyroid (4) Adrenal

128. Adrenal gland is :-
(1) Ectodermal in origin
(2) Mesodermal in origin
(3) Endodermal in origin
(4) Ecto - mesodermal in origin

129. Adrenaline increases :-
(1) Heart beat (2) Blood pressure
(3) Both (4) Salivation

130. Which hormone control activity of zona glomerulosa of adrenal gland ?
(1) Renin (2) Thyroxine
(3) ADH (4) FSH

131. All of the following are functions of adrenaline except:-
(1) Increases blood supply in skeletal muscle
(2) Hyperglycaemia
(3) Uterine relaxation
(4) Tachycardia

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132. When the primary sexual organ does not develop, puberty may appear due to :-
(1) Stimulation of adrenal cortex
(2) Stimulation of adrenal medulla
(3) Excessive secretion from gonads
(4) Reduced secretion from gonads

133. Norepinephrine hormone is secreted from :-
(1) Zona glomerulosa
(2) Zona fasiculata
(3) Zona reticularis
(4) Medulla of adrenal

134. Which gland is concerned with salt equilibrium in body :–
(1) Anterior pituitary (2) Pancreas
(3) Adrenal (4) Thyroid

135. Norepinephrine leads to increase in :–
(1) Blood pressure
(2) Urine production
(3) Cellular respiration
(4) Release of epinephrine

136. Largest amount of iodine is found in :-
(1) Adrenals (2) Liver
(3) Thyroid (4) Testes

137. Which gland prepares you for flight, fear and fight during adverse conditions :-
(1) Thyroid (2) Parathyroid
(3) Pituitary (4) Adrenal

138. Blood pressure is controlled by :-
(1) Adrenal gland (2) Thyroid gland
(3) Pituitary gland (4) Pancreas

139. Life saving hormone are secreted by :-
(1) Pituitary (2) Pineal
(3) Adrenals (4) Thyroid

140. Hypocalcaemia causes -
(1) Tetany (2) Osteoporosis
(3) Myxoedema (4) Cretinism

141. Temperature of body is controlled by which endocrine gland:-
(1) Pituitary (2) Thyroid
(3) Adrenal (4) Pancreas

142. During emergency which of the following hormone is secreted ?
(1) Aldosterone (2) Thyroxine
(3) Adrenaline (4) Calcitonin

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143. Corticosteroids are secreted by :
(1) Adrenal gland (2) Pineal gland
(3) Pituitary gland (4) Thyroid gland

144. Aldosterone is secreted by :
(1) Zona glomerulosa (2) Zona fasciculata
(3) Zona reticularis (4) Zona pellucida

145. Which gland stores hormone before its secretion and then release it ?
(1) Thyroid (2) Pancreas
(3) Pineal (4) Pituitary

146. Which of the following disease is not related to thyroid gland ?
(1) Goitre (2) Cretinism
(3) Myxoedema (4) Acromegaly

147. Grave's disease is due to :
(1) Hyperactivity of thyroid gland
(2) Hypoactivity of adrenal cortex
(3) Hyperactivity of adrenal medulla
(4) Hypoactivity of islets of Langerhans

148. Hypothyroidism causes in adult :
(1) Obesity (2) Diabetes
(3) Cretinism (4) Myxoedema

149. The hormone that controls the level of calcium and phosphorus in the blood is secreted by :
(1) Thyroid (2) Parathyroid
(3) Pituitary (4) Thymus

150. Obesity of face, hyperglycemia and virilism in females is characteristic of –
(1) Grave's disease
(2) Addison's disease
(3) Conn's disease
(4) Cushing's syndrome

151. Muscular tetany can be caused by deficiency of:
(1) Oxytocin (2) STH
(3) ADH (4) Parathyroid hormone

152. Addison's disease is caused due to :
(1) hypersecretion of adrenal cortical hormones
(2) hypersecretion of growth hormone
(3) hypersecretion of thymus
(4) none of the above

153. Para-thyroid hormone is a :
(1) Peptide (2) Carbohydrate
(3) Lipid (4) Steroid

154. Increase glucose level in human is called :
(1) Hypoglycemia (2) Hyperglycaemia
(3) Hyposuria (4) Hypersuria

155. Parathormone is secreted during :
(1) Increased blood calcium level
(2) Decreased blood calcium level
(3) Increased blood sugar level
(4) Decreased blood sugar level

156. Chronic disturbance in hormone secretion of thyroid gland causes :
(1) Goitre
(2) Diabetes
(3) Addison's disease
(4) Colour blindness

157. ACTH is secreted by:
(1) Thyroid gland
(2) Thymus gland
(3) Pituitary gland
(4) Islets of Langerhans

158. Fight and flight hormone is :
(1) Adrenaline (2) Thyroxine
(3) ADH (4) Oxytocin

159. The emergency hormone is :
(1) Thyroxine (2) Adrenaline
(3) Insulin (4) Progesterone

160. In man removal of Parathyroid gland leads to:
(1) Acromegaly
(2) Tetany
(3) Polyuria
(4) Diabetes insipidus

161. Parathormone induces :
(1) Increase in blood sugar level
(2) Decrease in serum calcium level
(3) Increase in serum calcium level
(4) Decrease in blood sugar level

162. Which disease is caused by under secretion of adrenal cortex ?
(1) Cretinism
(2) Dwarfism
(3) Sterility
(4) Addison's disease

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163. Role of thymus in *Homo sapiens* is chiefly concerned with :-
(1) Reproduction
(2) Immunology
(3) Calcium balance
(4) Blood coagulation

164. Melatonin is a hormone produced by :-
(1) Adrenal gland
(2) Pituitary gland
(3) Pineal gland
(4) Thymus gland

165. Mammals born without a thymus gland fail to manufacture :-
(1) B - Lymphocytes (2) T - Lymphocytes
(3) Plasma cells (4) Basophils

166. If thymectomy is done during adult hood then what possibility is there ?
(1) Immunosuppressant
(2) Die immediately
(3) No adverse reaction
(4) Myasthenia gravis

167. Thymosin stimulates :-
(1) Milk secretion (2) Erythrocytes
(3) T-lymphocytes (4) Melanocytes

168. Glucagon is secreted by :-
(1) Leydig cells
(2) Islets of Langerhans
(3) Corpus luteum
(4) Glisson's capsule

169. A hormone with seat of activity in liver-changing glucose into glycogen is produced by :-
(1) Pituitary (2) Thymus
(3) Parathyroid (4) Pancreas

170. Which gland is both exocrine as well as endocrine ?
(1) Pituitary (2) Mammary gland
(3) Thyroid (4) Pancreas

171. Oversecretion of glucagon can cause :-
(1) Tetany (2) Diabetes insipidus
(3) Acromegaly (4) Glycosuria

172. Insulin by chemical nature is :-
(1) Carbohydrate (2) Protein
(3) Steroid (4) Lipid

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173. Which of the following is not function of insulin ?
(1) Increase glycogenesis
(2) Increase glycogenolysis
(3) Increase up take of amino acid by liver and muscle
(4) Promote oxidation of glucose

174. Injection of Insulin to human leads to increased :-
(1) Glucose level of blood
(2) Glucose level of urine
(3) Glucose level of cells
(4) Calcium level of blood

175. Which hormone has anti insulin effect :-
(1) Cortisol (2) Oxytocin
(3) Aldosterone (4) Glucagon

176. In old age, immune system becomes weak due to gradual degeneration of :-
(1) Pineal gland (2) Parathyroid gland
(3) Thymus gland (4) Adrenal gland

177. Diabetic coma is due to hyposecretion of insulin in which :-
(1) Glucose level increased in blood
(2) Keto acidosis take place
(3) Dehydration process start
(4) All the above

178. T–cells mature in :
(1) Peyer's patch (2) Lymph node
(3) Thymus (4) Brusa of Fabricius

179. The diabetes mellitus is caused by :-
(1) Hyper secretion of Insulin
(2) Hyposecretion of Insulin
(3) Hyposecretion of ADH
(4) Hyper secretion of ADH

180. In diabetes mellitus disease, the urine contains :-
(1) Salt (2) Fat
(3) Protein (4) Sugar

181. A patient of diabetes mellitus drink more water and he eliminates extra amount of which substance from blood :-
(1) Protein (2) Sugar
(3) Fat (4) Hormone

182. Which gland decreases in size with increasing age?
(1) Thyroid (2) Adrenal
(3) Thymus (4) Pituitary

183. Insulin is secreted by :
(1) α–cell of islets of Langerhans
(2) δ–cell of islets of Langerhans
(3) β–cell of islets of Langerhans
(4) Pancreatic acinar cell

184. Which one of the following endocrine gland functions as a biological clock and neurosecretory transducer ?
(1) Adrenal gland (2) Thyroid gland
(3) Pineal gland (4) Thymus gland

185. Mammalian thymus is mainly concerned with:
(1) Regulation of body temperature
(2) Regulation of body growth
(3) Immunological functions
(4) Secretion of thyrotropin

186. The islets of Langerhans are found in :
(1) Pancreas (2) Stomach
(3) Liver (4) Alimentary canal

187. Melatonin is secreted by :
(1) Pineal gland (2) Parathyroid gland
(3) Pituitary gland (4) Thyroid gland

188. Insulin is related with :
(1) Diabetes (2) Migrain
(3) Jaundice (4) All of the above

189. A patient of diabetes mellitus excretes glucose in urine even when he is kept on a carbohydrate free diet. It is because :
(1) Fats are catabolised to form glucose
(2) Amino acids are catabolised in liver
(3) Amino acids are discharged in blood stream from liver
(4) Glycogen from muscles are discharged in blood stream from liver

190. Which gland atrophies in adult ?
(1) Pancreas (2) Thymus
(3) Thyroid (4) Adrenal

191. Ketone bodies are formed in :
(1) Liver (2) Spleen
(3) Kidney (4) Heart

192. The modern idea about ageing is that our body slowly loses the power of defence against the invasion of germs and pathogens. This process starts by the disappearance of which organ ?
(1) Spleen (2) Thymus gland
(3) Pituitary gland (4) Parathyroid gland

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193. Which of the following hormones secreted by pancreas ?
(1) Insulin and glucagon
(2) Epinephrine and nor-epinephrine
(3) Thyroxin and melanin
(4) Prolactin and oxytocin

194. The function of glucagon hormone is :
(1) To increase glycogenesis
(2) To decrease blood sugar level
(3) To release glucose from liver cells and glycogenolysis promotion
(4) To increase the absorption of glucose and fatty acids through cell

GONADS AND OTHER NON-ORGANISED GLANDS

195. Estrogen is secreted by :-
(1) Liver (2) Spleen
(3) Ovaries (4) Pituitary

196. Androgens are secreted by :-
(1) Pituitary (2) Testes
(3) Ovaries (4) Thyroid

197. Leydig cells are meant for :-
(1) Formation of sperm
(2) To produce progesterone
(3) To produce testosterone
(4) Nutrition of sperm

198. Progesterone hormone is secreted from :-
(1) Placenta
(2) Corpus luteum
(3) Both (1) and (2)
(4) Graafian follicle

199. The "erythropoietin" hormone regulates :-
(1) Blood pressure
(2) Water level of blood
(3) Glucose level of blood
(4) Rate of formation of red blood cells

200. Estrogen is secreted by :-
(1) Corpus albicans
(2) Corpus Callosum
(3) Corpus Luteum
(4) Cells of Graffian follicle

201. The "Estrogen" secretion is controlled by :-
(1) FSH (2) LH
(3) Progesterone (4) GH

202. Which of the following hormone is not secreted by gastro-intestinal tract ?
(1) Gastrin (2) Secretin
(3) Cholecystokinin (4) Erythropoietin

203. Which one is a female sex hormone ?
(1) Estrogen (2) Progesterone
(3) Estradiol (4) All of these

204. Atrial wall of the heart muscle secretes a peptide hormone to reduce the blood pressure is:
(1) Cholycystokinin
(2) Erythropoetin
(3) Atrial natriuretic factor
(4) Epinephrine

205. Feminizing hormone is :-
(1) Glucagon (2) Gastrin
(3) Oestrogen (4) Androgens

206. Which temporary endocrine gland forms in ovary after ovulation :-
(1) Corpus callosum
(2) Corpus albicans
(3) Corpus luteum
(4) Corpus striata

207. Secretin stimulates the activity of :-
(1) Salivary glands (2) Gastric gland
(3) Pancreas (4) Gall-bladder

208. Which hormone stimulates contraction of gall bladder :-
(1) CCK-PZ (2) ACTH
(3) LTH (4) FSH

209. Placenta produces which hormone
(1) GH (2) Gastrin
(3) ACTH (4) Progesterone

210. Hormone which is responsible for maintenance of pregnancy is :
(1) Estrogen (2) Aldosterone
(3) Progesterone (4) Testosterone

211. Which of the following steroid sex hormone influence secondary sex organs?
(1) Progesterone (2) Oestrogen
(3) LH (4) LTH

212. Progesterone is secreted from :
(1) Testes (2) Adrenal gland
(3) Pituitary gland (4) corpus luteum

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EXERCISE-I (Conceptual Questions) ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	4	4	1	4	1	4	3	4	1	4	3	4	4	2	3
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	3	4	2	4	3	3	1	2	2	4	1	3	3	3	1
Question	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Answer	3	2	4	1	1	2	3	3	1	4	3	4	1	4	1
Question	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Answer	4	1	1	4	1	4	4	2	2	1	4	1	1	3	2
Question	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Answer	4	2	3	3	3	4	2	1	4	2	4	2	3	3	1
Question	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Answer	3	2	3	2	4	1	4	2	2	4	2	1	2	2	2
Question	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
Answer	4	3	2	2	2	4	2	2	1	2	4	4	2	3	1
Question	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Answer	4	2	3	4	2	3	2	1	1	3	2	2	2	4	2
Question	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
Answer	1	1	3	1	1	3	4	4	3	1	3	1	4	3	1
Question	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
Answer	3	4	1	3	1	2	3	1	1	1	4	1	4	2	4
Question	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165
Answer	4	4	1	2	2	1	3	1	2	2	3	4	2	3	2
Question	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
Answer	3	3	2	4	4	4	2	2	3	4	3	4	3	2	4
Question	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195
Answer	2	3	3	3	3	1	1	1	1	2	1	2	1	3	3
Question	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210
Answer	2	3	3	4	4	1	4	4	3	3	3	3	1	4	3
Question	211	212													
Answer	2	4													

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Exercise - II (Previous Year Questions) AIPMT/NEET

AIPMT 2006

1. Which hormone causes dilation of blood vessels, increased oxygen consumption and glucogenesis?
(1) Adrenalin (2) Glucagon
(3) ACTH (4) Insulin

2. Sertoli cells are regulated by the pituitary hormone known as –
(1) Prolactin (2) LH
(3) FSH (4) GH

3. A steroid hormone which regulates glucose metabolism is –
(1) 11-deoxycorticosterone
(2) Cortisone
(3) Cortisol
(4) Corticosterone

4. Which one of the following is not a second messenger in hormone action ?
(1) Sodium (2) cAMP
(3) cGMP (4) Calcium

AIPMT 2009

5. A health disorder that results from the deficiency of thyroxine in adults and characterised by –
1. A low metabolic rate
2. Increase in body weight and
3. Tendency to retain water in tissue is
(1) Simple goitre (2) Myxoedema
(3) Cretinism (4) Hypothroidism

AIPMT-Pre 2010

6. Toxic agents present in food which interfere with thyroxine synthesis lead to the development of :
(1) Simple goitre
(2) Thyrotoxicosis
(3) Toxic goitre
(4) Cretinism

7. Injury to adrenal cortex is not likely to affect the secretion of which one of the following ?
(1) Adrenaline
(2) Cortisol
(3) Aldosterone
(4) Both Androstenedione and Dehydroepiandrosterone

8. Which one of the following pairs is incorrectly matched ?
(1) Corpus luteum – Relaxin (secretion)
(2) Insulin – Diabetes mellitus (disease)
(3) Glucagon – Beta cells (Source)
(4) Somatostatin – Delta cells (source)

AIPMT-Mains 2010

9. Which one of the following is now being commercially produced by biotechnolgical procedures ?
(1) Morphine (2) Quinine
(3) Insulin (4) Nicotine

10. Select the *correct* matching of a hormone, its source and function.

	Hormone	Source	Function
(1)	Norepine phrine	Adrenal medulla	Increases heart beat, rate of respiration and alertness
(2)	Glucagon	Beta-cells of langerhans	Stimulates glycogenolysis
(3)	Prolactin	Posterior pituitary	Regulates growth of mammary glands and milk formation in females
(4)	Vasopressin	Posterior pituitary	Increases loss of water through urine

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11. Signals from fully developed foetus and placenta ultimately lead to parturition which requires the release of :
(1) Oxytocin from maternal pituitary
(2) Oxytocin from foetal pituitary
(3) Relaxin from placenta
(4) Estrogen from placenta

AIPMT-Pre 2012

12. Which one of the following pairs of hormones are the examples of those that can easily pass through the cell membrane of the target cell and bind to a receptor inside it (mostly in the nucleus) :-
(1) Somatostatin, oxytocin
(2) Cortisol, testosterone
(3) Insulin, glucagon
(4) Thyroxin,Insulin

NEET-UG 2013

13. A pregnant female delivers a baby who suffers from stunted growth, mental retardation, low intelligence quotient and abnormal skin.
This is the result of :
(1) Over secretion of pars distalis
(2) Deficiency of iodine in diet
(3) Low secretion of growth hormone
(4) Cancer of the thyroid gland

14. Which of the following statements is **correct** in relation to the endocrine system?
(1) Releasing and inhibitory hormones are produced by the pituitary gland.
(2) Adenohypophysis is under direct neural regulation of the hypothalamus.
(3) Organs in the body like gastrointestinal tract, heart, kidney and liver do not produce any hormones.
(4) Non-nutrient chemicals produced by the body in trace amount that act as intercellular messenger are known as hormones.

AIPMT 2014

15. Which of the following causes an increase in sodium reabsorption in the distal convoluted tubule ?
(1) Increase in aldosterone levels
(2) Increase in antidiuretic hormone levels
(3) Decrease in aldosterone levels
(4) Decrease in antidiuretic hormone levels

16. Identify the hormone with its **correct** matching of source and function :
(1) Oxytocin - posterior pituitary, growth and maintenance of mammary glands.
(2) Melatonin - pineal gland, regulates the normal rhythm of sleepwake cycle.
(3) Progesterone - corpus-luteum, stimulation of growth and activities of female secondary sex organs.
(4) Atrial natriuretic factor - ventricular wall increases the blood pressure.

17. Fight-or-flight reactions cause activation of :
(1) the parathyroid glands, leading to increased metabolic rate.
(2) the kidney, leading to suppression of renin-angiotensin-aldosterone pathway.
(3) the adrenal medulla, leading to increased secretion of epinephrine and norepinephrene.
(4) the pancreas leading to a reduction in the blood sugar levels.

Re-AIPMT 2015

18. Which one of the following hormones is **not** involved in sugar metabolism ?
(1) Glucagon (2) Cortisone
(3) Aldosterone (4) Insulin

19. Which one of the following hormones though synthesised elsewhere, is stored and released by the master gland ?
(1) Melanocyte stimulating hormone
(2) Antidiuretic hormone
(3) Luteinizing hormone
(4) Prolactin

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NEET-I 2016

20. Which of the following pairs of hormones are **not** antagonistic (having opposite effects) to each other?
(1) Parathormone – Calcitonin
(2) Insulin – Glucagon
(3) Aldosterone – Atrial Natriuretic Factor
(4) Relaxin – Inhibin

NEET-II 2016

21. Graves' disease is caused due to :-
(1) Hyposecretion of adrenal gland
(2) Hypersecretion of adrenal gland
(3) Hyposecretion of thyroid gland
(4) Hypersecretion of thyroid gland

22. Name a peptide hormone which acts mainly on hepatocytes, adipocytes and enhances cellular glucose uptake and utilization.
(1) Secretin (2) Gastrin
(3) Insulin (4) Glucagon

23. Osteoporosis, an age–related disease of skeletal system, may occur due to :-
(1) Decreased level of estrogen
(2) Accumulation of uric acid leading to inflammation of joints.
(3) Immune disorder affecting neuro–muscular junction leading to fatigue.
(4) High concentration of Ca^{++} and Na^{+}.

24. The posterior pituitary gland is **not** a 'true' endocrine gland because :-
(1) It is under the regulation of hypothalamus
(2) It secretes enzymes
(3) It is provided with a duct
(4) It only stores and releases hormones

NEET(UG) 2017

25. A temporary endocrine gland in the human body is:
(1) Corpus cardiacum
(2) corpus luteum
(3) Corpus allatum
(4) Pineal gland

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26. GnRH, a hypothalamic hormone, needed in reproduction, acts on:
(1) anterior pituitary gland and stimulates secretion of LH and FSH.
(2) posterior pituitary gland and stimulates secretion of oxytocin and FSH.
(3) posterior pituitary gland and stimulates secretion of LH and relaxin.
(4) anterior pituitary gland and stimulates secretion of LH and oxytocin.

27. Hypersecretion of Growth Hormone in adults does not cause further increase in height, because:
(1) Epiphyseal plates close after adolescence.
(2) Bones loose their sensitivity to Growth Hormone in adults.
(3) Muscle fibres do not grow in size after birth.
(4) Growth Hormone becomes inactive in adults.

NEET(UG) 2018

28. Which of the following is an amino acid derived hormone ?
(1) Epinephrine (2) Ecdysone
(3) Estradiol (4) Estriol

29. Which of the following hormones can play a significant role in osteoporosis ?
(1) Aldosterone and Prolactin
(2) Progesterone and Aldosterone
(3) Estrogen and Parathyroid hormone
(4) Parathyroid hormone and Prolactin

NEET(UG) 2019

30. How does steroid hormone influence the cellular activities?
(1) Changing the permeability of the cell membrane.
(2) Binding to DNA and forming a gene-hormone complex.
(3) Activating cyclic AMP located on the cell membrane.
(4) Using aquaporin channels as second messenger.

TG: @Chalnaayaaar

31. Match the following hormones with the respective disease :

(a) Insulin	(i) Addison's disease
(b) Thyroxin	(ii) Diabetes insipidus
(c) Corticoids	(iii) Arcomegaly
(d) Growth Hormone	(iv) Goitre
	(v) Diabetes mellitus

Select the **correct** option.

	(a)	(b)	(c)	(d)
(1)	(v)	(i)	(ii)	(iii)
(2)	(ii)	(iv)	(iii)	(i)
(3)	(v)	(iv)	(i)	(iii)
(4)	(ii)	(iv)	(i)	(iii)

NEET (UG) 2019 (Odisha)

32. Which of the following hormones is responsible for both the milk ejection reflex and the foetal ejection reflex ?

(1) Estrogen (2) Prolactin
(3) Oxytocin (4) Relaxin

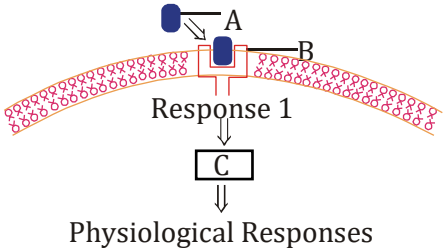
33. Which of the following conditions will stimulate parathyroid gland to release parathyroid hormone?

(1) Fall in active Vitamin D levels
(2) Fall in blood Ca^{+2} levels
(3) Fall in bone Ca^{+2} levels
(4) Rise in blood Ca^{+2} levels

34. Artificial light, extended work-time and reduced sleep–time disrupt the activity of

(1) Thymus gland
(2) Pineal gland
(3) Adrenal gland
(4) Posterior pituitary gland

35. Identify A, B and C in the diagramatic representation of the mechanism of hormone action.



Select the correct option from the following :

(1) A-Steroid Hormone; B-Hormone-receptor Complex, C-Protein
(2) A-Protein Hormone, B-Receptor; C-Cyclic AMP
(3) A-Steroid Hormone; B-Receptor, C - Second Messenger
(4) A-Protein Hormone; B-Cyclic AMP, C-Hormone-receptor Complex

NEET (UG) 2020

36. Select the correct statement.

(1) Insulin is associated with hyperglycemia
(2) Glucocorticoids stimulate gluconeogenesis
(3) Glucagon is associated with hypoglycemia.
(4) Insulin acts on pancreatic cells and adipocytes.

37. Presence of which of the following conditions in urine are indicative of Diabetes Mellitus ?

(1) Renal calculi and Hyperglycaemia
(2) Uremia and Ketonuria
(3) Uremia and Renal Calculi
(4) Ketonuria and Glycosuria

38. Match the following columns and select the **correct** option :

	Column-I	**Column-II**
(a)	Pituitary gland	(i) Grave's disease
(b)	Thyroid gland	(ii) Diabetes mellitus
(c)	Adrenal gland	(iii) Diabetes insipidus
(d)	Pancreas	(iv) Addison's disease

	(a)	(b)	(c)	(d)
(1)	(ii)	(i)	(iv)	(iii)
(2)	(iv)	(iii)	(i)	(ii)
(3)	(iii)	(ii)	(i)	(iv)
(4)	(iii)	(i)	(iv)	(ii)

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NEET (UG) 2020 (Covid-19)

39. Match the following columns and select the correct option :-

Column-I	**Column-II**
(a) Pituitary hormone	(i) Steroid
(b) Epinephrine	(ii) Neuropeptides
(c) Endorphins	(iii) Peptides, proteins
(d) Cortisol	(iv) Biogenic amines

(1) (a)-(iv), (b)-(i), (c)-(ii), (d)-(iii)
(2) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)
(3) (a)-(iv), (b)-(iii), (c)-(i), (d)-(ii)
(4) (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)

40. Hormones stored and released from neurohypophysis are :-
(1) Thyroid stimulating hormone and Oxytocin
(2) Oxytocin and Vasopressin
(3) Follicle stimulating hormone and Leutinizing hormone
(4) Prolactin and Vasopressin

NEET (UG) 2021

41. Erythropoietin hormone which stimulates R.B.C. formation is produced by :
(1) Alpha cells of pancreas
(2) The cells of rostral adenohypophysis
(3) The cells of bone marrow
(4) Juxtaglomerular cells of the kidney

Exercise - II (Previous Year Questions) ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	1	3	3	1	2	1	1	3	3	1	1	2	2	4	1
Question	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Answer	2	3	3	2	4	4	3	1	4	2	1	1	1	3	2
Question	31	32	33	34	35	36	37	38	39	40	41				
Answer	3	3	2	2	2	2	4	4	2	2	4				

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Exercise - III Master Your Understanding

EXERCISE-III (A) (NCERT Based QUESTIONS)

1. Steroid hormones –
(1) Have only cell surface receptors
(2) Are lipophobic
(3) Have receptors within the nucleus
(4) Are produced by only adrenal cortex.

2. Both adrenaline and cortisol are secreted in response to stress. Which of the following statements is also true for both of these hormones?
(1) They act to increase blood glucose
(2) They are secreted by the adrenal cortex
(3) Their secretion is stimulated by adrenocorticotropin
(4) They are secreted into the blood within seconds of the onset of stress.

3. Which one is incorrect for hypothalamus ?
(1) Basal part of diencephalon
(2) Regulate narrow spectrum of body functions
(3) Neural control of posterior pituitary
(4) Release somatostatin for GH Inhibition

4. Pineal gland is not related with :-
(1) Body temperature
(2) Defence capability
(3) Metabolism
(4) Kidney functions

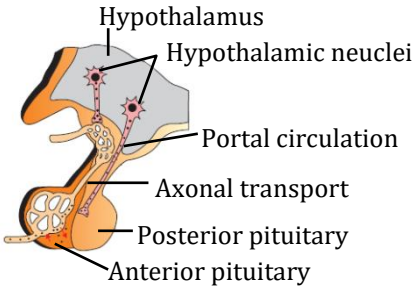
5. Vigrous contraction of uterus muscles is stimulated by:-
(1) ADH (2) MSH
(3) GH (4) Oxytocin

6. Find out correctly matched :-
(A) Thymus – AMI
(B) PTH – Ca^{+2} absorption
(C) Adrenal – glucocorticoids
(D) Thyroid – Anti-inflammatory response
(1) A, B, D (2) A, B, C
(3) B, C, D (4) A, C, D

7. Which one is incorrect statement ?
(1) Hypothalamus regulate a wide spectrum of body functions.
(2) Pituitary, pineal, testes, heart and kidney are organised endocrine gland of body.
(3) Hormones are non-nutrient chemicals and intercellular messenger.
(4) LH helps in maintenance of corpus luteum after ovulation.

TG: @Chalnaayaar

8. Find out incorrect labelling in following diagram



(1) Axonal transport and Anterior pituitary
(2) Portal circulation and Posterior pituitary
(3) Anterior pituitary and Posterior pituitary
(4) Portal circulation and Axonal transport

9. Find out incorrect match of hormone with respective function :-

	Hormone	Function
(1)	**Melatonin**	Sleep wake cycle and body temperature
(2)	**FSH**	Growth of ovarian follicles and stimulate gonadial activity.
(3)	**Adrenaline**	Increase concentration of glucose in blood.
(4)	**Progesterone**	Stimulate growth and activities of female secondary sex organs

10. Hyperglycemic and hypoglycemic hormones are
(1) Insulin and glucagon
(2) Adrenalin and glucagon
(3) Adrenalin and Insulin
(4) Glucagon and growth hormone

11. Group of hormones which is related with cytoplasmic bounded receptors ?
(1) Hypothalamic hormones and epinephrine
(2) Thyroid hormone and estradiol
(3) Insulin and glucagon
(4) GH and MSH

12. Two hormones .....(a)..... and .....(b)..... synthesize in hypothalamus and transported in pituitary gland through .....(c)..... and .....(d)..... respectively.
(1) a = oxytocin ⇒ c = portal circulation
b = ADH ⇒ d = direct release
(2) a = ADH ⇒ c = axonal transport
b = TSHRF ⇒ d= portal circulation
(3) a = ACTH ⇒ c = axonal transport
b = MSH ⇒ d= portal circulation
(4) a = TSHRF ⇒ c = axonal transport
b = ADH ⇒ d= portal circulation

EXERCISE-III (B) (ANALYTICAL QUESTIONS)

13. Which one is correctly matched ?
(a) Pineal gland – Metabolism, Mental retardation
(b) Thymus – Mysthenia gravis
(c) Thyroid – Anti inflammatory reaction
(d) Pancreas – Prolonged hyperglycemia
(1) a, c (2) b, c (3) c, d (4) b, d

14. Which one of the following decreases blood pressure ?
(1) Insulin (2) ANF
(3) ADH (4) Aldosterone

15. After ovulation, ruptured follicle secrete hormone that helps in :-
(1) Libido
(2) Growth of facial hair
(3) High pitch voice
(4) Pregnancy support

16. Diabetic patients are successfully treated with:-
(1) GH therapy
(2) More amount of thyroxine
(3) Insulin therapy
(4) Both (2) and (3)

17. Find out suitable match for the following hormones and related organ :-
(1) ANF – Heart, Calcitonin – parathyroid
(2) Renin – Kidney, Relaxin – Placenta
(3) Calcitonin – Kidney, HCG → Ovary
(4) Oestrogen – Testes, Progesterone → Graafian follicle

18. Parathormone causes :-
(1) Hypercalcemia
(2) Hyperglycemia
(3) Hyperkalemia
(4) Hypocalcemia and hypoglycemia both

19. In mammals the female secondary sexual characters are developed mainly by the hormone?
(1) HCG (2) Progesterone
(3) Estrogens (4) All of these

20. Which of the following is an accumulation and release centre of Neurohormones?
(1) Anterior Pituitary lobe
(2) Neurohypophysis
(3) Pars intermedia
(4) Hypothalamus

21. BMR and Temperature of body is controlled by which endocrine gland?
(1) Adrenal cortex (2) Thymus
(3) Thyroid (4) Pituitary

22. Reabsorption of Na^+ along with excretion of K^+ is controlled by which one of the following hormones?
(1) Prostaglandins (2) Aldosterone
(3) Estrogen (4) Cortisol

23. Location and secretion of Leydig cells are?
(1) Pancreas – Glucagon
(2) Ovary – Estrogen
(3) Ovary – Progesterone
(4) Testis – Testosterone

24. Urinary excretion of Na^+ is regulated by–
(1) Anterior Pituitary
(2) Adrenal cortex
(3) Neurohyphophysis
(4) Pars intermedia

25. Thyrocalcitonin is secreted during –
(1) Increased blood calcium level
(2) Decreased blood calcium level
(3) Both (1) and (2)
(4) Increased blood sugar level.

26. Which of the following hormones increase alertness, piloerection and sweating ?
(1) TCT (2) Catecholamines
(3) Cortisol (4) Thymosins

Exercise - III ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer	3	1	2	4	4	2	2	4	4	3	2	2	4	2	4
Question	16	17	18	19	20	21	22	23	24	25	26				
Answer	3	2	1	3	2	3	2	4	2	1	2				

TG: @Chalnaayaaar